

THE BOARD OF PATENT APPEALS AND INTERFERENCES

United States Patent and Trademark  
Office ex. rel. Patent Examiner Jamara A.  
Franklin, Art Unit 2876;

**Patent Examiner,**

v.

Moutaz Kotob, Bettendorf, Iowa;  
Ralph J. Anderson, Moline, Illinois;  
Jay C. Bennett, Jr., Bettendorf, Iowa;  
Paul T. VanCamp, Bettendorf, Iowa;  
David J. Steil, Bettendorf, Iowa;

**Patent Applicants.**

U.S. Patent Application #  
09/023556

APPEAL BRIEF

**I. Real Party in Interest**

This patent application has been assigned to the Fidler and Chambers Company located in Rock Island, Illinois and as such the Fidler and Chambers Company is the real party in interest.

**II. Related Appeals and Interferences**

No other appeals or interferences as related to this application are known to be pending before this tribunal or any other tribunal by appellant, appellant's agent or assignee.

**III. Status of Claims**

The status of all claims submitted, 1-24, is pending. Appellant appeals the examiner's final rejection of claims 1-24.

**IV. Status of Amendments**

No amendment has been filed subsequent to the final rejection of the claims submitted and pending.

## **V. Summary of Invention**

This invention relates to Automated Voting Systems and more particularly to a system for verifying registered voters and collecting and tabulating votes from a single or a plurality of voting mechanisms.

As is well known, and has been set forth by the political pundits and electorate, voter privacy and the requirement of security, i.e. that the ballots all be verified and be counted accurately with no ballots which have not been correctly filled out be counted. One method is providing security at the voting site with voter poll watchers. This has been the traditional method of providing for the accuracy and authenticity of the vote and the voting results.

The use of authorized voting personnel to verify each voters name and verify that they are the person whom they represent to be from a master list of registered voters and providing a paper ballot to the voter has worked well in the past. However, this procedure is slow by today's standards and there is the potential for inaccurate counting and/or having ballots which have not been properly filled out counted. Verification systems must maintain the privacy of the voter so that names are not associated with the ballots once the ballots have been issued to the voters or voted by voter.

Another method of casting ballots is the use of mechanical devices to present the voters selection, after verification i.e. a ballot form adjacent the mechanical levers.

Another method of casting ballots is for the voter to punch holes in a computer card where each hole represents a certain candidate or issue on the ballot. The cards are then machine read and votes tabulated.

These methods have disadvantages and they may be potentially inaccurate, i.e. the vote may not be registered in the case of the mechanical lever for some mechanical reason or the cards with the punched holes provide no way for a voter to change their minds. With the requirement in some voting districts that the ballots including any local issues be in a different language i.e. Spanish or some other language. An automated system which will automatically on command present the ballots in the required language would be useful.

This invention relates to Automated Voting Systems and more particularly to a system for verifying registered voters and collecting and tabulating votes from a single or a plurality of voting mechanisms. This invention includes the vote entry station, which incorporates an integrated computer program with an integrated pointing device with graphical user interface for displaying the ballots or issues on a screen. The vote entry station incorporates all requisite functions and is unitary and self-standing. The programmed vote entry station has an electronic keypad/keyboard for display and entry of write-in candidates. It also permits the voting for more than one write-in candidate, if allowed.

In addition, the program protects from over-votes while allowing voters to change their vote prior to casting. The program contained in the voting device at the vote entry station, either a single unit or multiple units permits tracking the number of votes cast by each unit and the entry station displays the count.

Advantages of this system also include the fact that the voting entry stations are capable of being programmed by one or more election workers to provide all voter entry stations with multiple ballot screens and styles. The voter can select the language to be displayed on the ballots. The vote entry station is activated by at least one activation code entered by the election workers to prevent fraud.

There may also be an election unit in data communication with the vote entry station to provide information and verification of such things as the voter authorization code, verification of the voter registration data. This unit may also be programmed to verify voter signature, voter fingerprints, voter voiceprint, voter eye print and can also update voter history.

Advantages of this voter system also include the ability to have an automated voting system which comprises either a single voting device which will perform all of the functions described above or utilizing the identical voting device as a host or control unit so that various voting stations may be controlled from one unit. The voting system is controlled by authorization codes which verify voter approval, utilizes election security cards to verify and activate the operation of the voter system equipment. The equipment

is not operable except by the use of the proper election security card which usually is provide in sealed envelopes by the election authority.

Each individual one of these vote entry stations provides for data communication between the stations and between the stations and any central vote collection storage unit. The primary function of the data communicated between each voting station and any central vote collection storage unit is the count for each unique voter.

Communication of the unique voter count serves as a back-up counter in the event one voting station unit fails during the voting process. The combination of data communication and unique voter count ensure no vote is lost. Each unique voter count is transmitted to another voting station. In addition, this election device provides for the automatic printing or separate printer on hard copy of test results to verify the accuracy and of the final tabulation of the votes.

Several automated voting systems have been used wherein computers have aided in the gathering and counting of the votes. Two U.S. Patents which describe automated voting systems are U.S. Patent No. 4,774,665 and U.S. Patent No. 5,218,528. These patents describe systems wherein there is either a number of precinct or local stations, voting work stations for tabulating the votes and a central work station for controlling the programming and tabulating at the precinct stations.

## **VI. Issues**

- A. Is the cited reference of U.S. Patent #6,073,054 issued to Katayama analogous prior art?**
- B. Is there motivation to combine the referenced prior art as cited to support a 103(a) rejection?**

## **VII. Grouping of Claims**

The claims at issue should be grouped in the following manner:

Claim Group 1 should include claims 8,12, 13 and 21, 22, 23 and 24.

Claim Group 2 should include claims 1-7, 9-11, 14-20.

## **VIII. Argument**

- i. Appellee examiner has issued no rejection of appellant's claims based on 35 U.S.C. 112, first paragraph.**
- ii. Appellee examiner has issued no rejection of appellant's claims based on 35 U.S.C. 112, second paragraph.**
- iii. Appellee examiner has issued no rejection of appellant's claims based on 35 U.S.C. 102.**
- iv. Appellee examiner has issued a rejection of appellant's claims based on 35 U.S.C. 103. Appellant argues that Appellee's factual analysis is incorrect and that Appellee has incorrectly applied 35 U.S.C. 103(a) legal precedent to the application presented for review.**

**A. Is the cited reference of U.S. Patent #6,073,054 entitled "Information Processing System" issued to Katayama analogous prior art?**

Based on both the law and the facts available applicant strenuously argues that the examiner in the present case has erroneously included the Katayama reference (US Patent #6,073,054 included in Appendix 2) in her 35 U.S.C. 103(a) analysis. When applying 35 U.S.C. 103 to a patent application, the following tenets of the patent law must be adhered to:

- (A) The claimed invention must be considered as a whole;
- (B) The references must be considered as a whole and must suggest the desirability and the thus the obviousness of making the combination;
- (C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention and
- (D) Reasonable expectation of success is the standard with which obviousness is determined.

See *Hodosh v. Block Drug, Co., Inc.*, 786 F.2d 1136, 1143 n. 5 (Fed. Cir 1986).

As a preliminary matter it should be noted that the reference U.S. Patent #6,073,054 (hereinafter referred to as Katayama) is classified as 700/28; 700/2; 700/9; 700/40; 700/90; and 700/91. The title of the 700 Class is Data Processing: Generic Control Systems or Specific Applications. None of the other five (5) references cited and combined by the examiner to sustain the 103(a) obviousness rejection are within these classes. The other five (5) references primarily have 364, 395 or 235 classifications.

The title of the class is Registers and includes a specific subclass (51) for voting machines. The 364 and 395 classes have been replaced by the 235 class.

The object of the invention described in Katayama is to reduce the amount of processing in a supervising system, and also to remove the interference generated among sub-systems to optimize the entire system. (Col. 1, lines 47-50). Katayama achieves the object "by partially shifting the supervising function of the supervising system to the sub-systems so that any sub-system can carry out the supervising function, and by repeating the communication between the supervising systems thereby to optimized (sic) the entire system." (Col. 1, lines 51-56). The teachings of Katayama are not applicable to the present invention for six primary reasons:

1. Applicant does not describe a system that allows sub-systems to carry-out the supervising function as described in Katayama. The sub-systems as described within the present invention are each identical. To supervise is defined as to "superintend" and or "oversee".<sup>1</sup> The sub-systems found in the present invention do not supervise each other when in operation. Instead the subsystems provide 1) a redundant count of the votes cast and 2) allow only one subsystem to communicate outside the poll station. When more than one subsystem is found at one polling place, one sub-system can be assigned the role of Poll Official Station (POS). Regardless of whether the POS function is used, if more than one sub-system is in place in one physical location, each sub-system registers or keeps track of the vote count from the other sub-systems at that physical location. Thus, if a subsystem fails, the vote count registered within the failing

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<sup>1</sup> Webster's Ninth Collegiate Dictionary, 1987.



sub-system is never lost and the vote cast by the electorate using the subsystem before it failed is still entered in the election.

2. Data in the present invention is never repeated. The data communicated between the voting stations is a unique number corresponding to the count at that particular station.
3. The evaluation step described by Katayama is not found in the present application. Katayama teaches the step of evaluating data produced by one sub-system for use either in the overall control system or by another sub-system with the goal of optimizing operating of both the sub-system and entire system controlled. There is no data evaluation within the present application with the objective of optimizing the sub-system or system. The object of the sub-system communication or control system is to preserve the vote information in the event one sub-system fails.
4. The primary object of Katayama invention is to avoid interference i.e. disruption produced by the failure of a sub-system to control an operation. Information is shared between systems to optimize the overall operation of the system controlled as factors or inputs change. (Col. 1, lines 57-63) Optimization as taught and used in Katayama is for such purposes as controlling a robot (See generally, Col. 7, lines 1-50) or multi-process factory (Col. 1, lines 51-56). Col. 9, lines 51-67) Changes are implemented by controlling sub-system input or output variables i.e. temperature, rate or speed, amounts or quantities, etc. The primary purpose of applicant's invention is to provide redundancy in counting votes cast

and to allow only one unit per physical location to communicate the vote cast data back to a central collection point for counting.

5. Katayama teaches that when a sub-system fails, another sub-system takes over the function. The subsystems described by applicants do not take over the function of the other failed sub-system. Instead the non-failing sub-system continues its primary task of controlling and casting votes entered at its station for delivery/transmission to the central system and secondarily, delivering/transmitting the voting information/count cast by the failed sub-system. In direct contrast, applicant's invention has no optimization step because no evaluation step takes place.
6. Katayama teaches two separate systems, one is a supervising subsystem 1 and the other is the subsystem 3. They are not the same units i.e., as the data base 18 is present in the subsystems as shown in figure 2 and as recited (col. 3, lines 58-67 and col. 4, lines 1-4) on the other hand, knowledge 13 relative to subsystem 3 is obtained by abstracting and simplifying data stored in the data base and transferred to the supervising subsystem 1. The examiner states that Katayama teaches an information processing system comprising a supervising information processing system 1 and one or more subsystems 3. The examiner states that in operation the supervising system 1 directs the plurality of subsystems 3 and that one in the ordinary skill in the art would of readily recognized that having one vote processing system control all other vote processing systems is beneficial as opposed to having two separate units.

Finally, the examiner then goes on to state that based on the teachings of Katayama discussed and that one of ordinary skill in the art would have readily recognized that having one vote processing system control all other vote processing systems is beneficial, as opposed to having two separate units since the controlling system is merged into the voting station, thereby taking up less space and consuming less power. This analysis misses the objective of the present invention entirely and is without any objective evidence. There is no suggestion in the cited references that combining the sub-system and supervising system in unit one is for the purpose of consuming power and or saving space. In direct opposite, the inventor's purpose in combining the two was for interchangeability, control and to promote redundancy not for saving space and reducing power. Those benefits are byproducts of the invention's primary purpose 1) ensuring no vote cast is lost and 2) no vote cast is counted twice.

**B. Is there motivation to combine the referenced prior art as cited to support a 103(a) rejection?**

Applicant first argues that the examiner has not considered the claimed invention as a whole. Instead the examiner has rejected the submitted claims as being anticipated by a conglomerate of references using bits and pieces of each reference to show specific elements of applicant's invention.

Next, applicant argues that there is no substantial evidence cited by the examiner to show that the motivation for combining the elements is shown in any of the patents cited. See Werner Kotzab No. 99-1231 (Fed. Cir. Jun 30, 2000). The court noted in this case the common situation where an examiner deems motivation for combining

elements merely from the simplistic nature of the inventive principle. The court goes on to note that "particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed."

Further note that in Brown & Williamson Tobacco Corp. v. Philip Morris Inc. Nos. 99-1389,-1403 (Fed. Cir. Oct. 17, 2000) the court says that the criterion for a finding of obviousness under 35 U.S.C. § 103 is "whether the prior art would have suggested to one of ordinary skill in the art that this process should be carried out and would have a reasonable likelihood of success, viewed in the light of the prior art." In order to satisfy this criterion, the party alleging obviousness must show a suggestion, motivation, or teaching to combine the prior references as well as a reasonable expectation of success.

**Analysis of Claim Group 1 (including Claims 8,12,13,18 and 22-24):**

The Examiner rejected claim 1 under 35 U.S.C. 103 (a) as being unpatentable over Wise et al. (U.S. Patent #5,218,528 hereinafter referred to as "Wise" and included in Appendix 3) in view of Webb (U.S. Patent #4,774,665 hereinafter referred to as "Webb" and included at Appendix 4) and in further view of Davis, III et al (U.S. Patent #5,583,329 hereinafter referred to as "Davis" and included at Appendix 5). The Examiner states that Webb discloses an automated voting device consisting of a monitor and states that Wise fails to show one voting station to control the remaining stations. Wise has a separate vote entry controller 11. The Examiner states that it would have been obvious to allow vote entry controller 11 to function as a vote entry

station 12 since the two booths are comprised of the same electronic elements (i.e. printer, keyboard, computer, mass data storage device, and display) and are already interconnected. The Examiner states that the vote entry controller 11 could function as a vote entry station 12, however Wise states specifically that the vote entry station 12 is completely controlled by the vote entry controller 11. In Wise, the central controller is the central point of failure; if the controller fails the system is down, whereas in applicant's invention another station may pick up and take over the controlling functions. (Wise Col. 2, Lines 20-23) The Examiner then states that Wise did not show an automated voting device utilizing a graphical interface or any security aspects i.e., an internal password or external security check. The Examiner then utilizes Webb to furnish the security checks and Davis includes a touch screen display. The Examiner states that it would have been obvious to one of ordinary skill in the art to combine the teaching of the preceding inventors.

The examiner's analysis does not indicate a full understanding of the applicant's invention, patentable subject matter or the prior art. The abstract and background of Wise clearly teaches the use of graphical (user) interface and security by stating:

"Advantages of the system are that it provides an integrated approach to automated voting. The system improves traditional voting methods by maintaining voter privacy and enhancing vote security. The vote entry controller and the vote entry stations provide multiple levels of security to prevent tampering with the voting process and to facilitate recounts if necessary"(Wise Col. 2, Lines 13-20).

Citation of the Webb and Davis prior art are unnecessary to teach the graphical interface and vote count security. These subjects are already taught by Wise; however, the Wise teachings still do not anticipate nor suggest applicant's invention is obvious. One critical teaching of Wise for the purpose of this application are that in Wise the vote entry stations are operable only when activated by the vote entry controller and become inoperable after the voter makes his final selection. Thus, the teachings of Wise provide that all the stations are subservient to one controller, i.e. each station is a drone whereas in the present application each station is independent of the other stations. The independent stations of the present application are not controlled by any other station, but the stations do communicate with each other to provide vote count redundancy to ensure no vote is lost. If one vote station fails and the other station continues to operate, the operating station will communicate the vote count of the failed station providing the necessary vote count redundancy.

The examiner further rejected claims 8, 12 and 13 under 35 U.S.C. 103(a) as being unpatentable over Wise/Webb/Davis as applied to claim 1 above, and further in view of Katayama. The examiner states that Katayama teaches an information processing system comprising a supervising information processing system 1 and one or more subsystems 3. The examiner states that in operation the supervising system 1 directs the plurality of subsystems 3 and that one in the ordinary skill in the art would of readily recognized that having one vote processing system control all other vote processing systems is beneficial as opposed to having two separate units. Katayama teaches two separate systems, one is a supervising subsystem 1 and the other is the subsystem 3. They are not the same units i.e., as the database 18 is present in the

subsystems as shown in Figure 2 and as recited. (col. 3, lines 58-67 and col. 4, lines 1-4) On the other hand, knowledge 13 relative to subsystem 3 is obtained by abstracting and simplifying data stored in the database and transferred to the supervising subsystem 1. Thus, Katayama still teaches two separate units and that they each perform their own distinct function.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wise and Webb as applied to claim 14, and further in view of U.S. Patent #5,278,753 issued to Graft, III et al. (hereinafter referred to as "Graft" and included at Appendix 6). The examiner states that neither Wise nor Webb show a method of inactivating the voting station. (But see Wise at Col. 3, lines 41-44 and Col. 6, lines 55-59 discussing methods of inactivation of a vote station again indicating a misunderstanding of the prior art by the examiner) The examiner cites Graft III to teach a method of inactivation using a lock 32 to be fastened using a key that would inherently inactivate the machine. Citation of Graft is unnecessary. Applicant submits that adding a lock would not be obvious because the voting station is also the entry controller and that the controller is not inactivated in Wise. Claim 18 was also rejected under 35 U.S.C. 103(a) as being unpatentable over Wise in view of Webb as applied to claim 14, and further in view of Graft. The Examiner states that Graft teaches a lock 32 to be fastened using a key which is only available by precinct officials and that one of ordinary skill could merge the lock 32 taught by Graft and the teachings of Wise and Webb regarding claim 14, allowing a voting station to be further protected.

Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wise and Webb. The cited references fail to teach one of a plurality of voting

stations controlling all the other voting stations. The examiner then goes on to state that it would have been obvious at the time of the invention to modify the teachings of Wise in view of Webb with the master-slave system as taught by Katayama. Applicant has fully discussed Katayama above and differentiated it. Applicant's invention is not taught by Katayama because applicant's invention does not have one vote processing system controlling all the others and because the functions of Katayama require two different systems. Further, as shown in figure 2 of Katayama, the stations are not all the same which is different than applicant's invention that describes a voting system of encompassing a plurality of identical stations.

Claims 20-23 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Wise in view of Webb. Here again the Examiner states that it would have been obvious to make a vote entry controller 11 function as a vote entry station 12 (found in Wise) as previously discussed and still operate as a controlling station. Again, the Examiner fails to state how the voter entry station of either Wise or Webb could act as a vote entry station and control sending the vote count of a plurality of stations to a central station. Each vote entry station described by Wise and Webb is controlled as to activation by another station. No such control is necessary for the vote entry stations of the present invention to communicate their vote count to a central station.

Applicant submits that the references would not have suggested of those to ordinary skill in the art to combine the voter registration station with the voter entry controller based upon the references cited. Katayama does not disclose that suggestion or motivation, though it does disclose that the stations may take over operations but no reference is made to the operation of counting. However as noted as



throughout the reference and specifically discussed at Column col. 1, lines 57-66, in operation the supervising system directs the subsystems, evaluates the responses from the subsystems and so operates the entire system for optimization. Thus, the supervising function which is has been collectively carried out by the supervising system can be partially shifted to the subsystems thereby greatly reducing the amount of processing in the supervising system. Further since any optimal subsystem can carry out the supervising function, rapidly fixing the supervising system is not necessary. Obviating the failure of the entire system is not possible due to the partial supervising system in the subsystem. Katayama's system is not started out to operate without the supervising system, which is a separate entity as shown and discussed, unlike the present invention which may be operated as a stand alone unit when the POS function is not chosen. The examiner has not shown substantial evidence to show that the single controller of the present invention, i.e. the vote counter is the same as a single controller in a complex system.

The Examiner has responded to the applicants' arguments as non-persuasive. The Examiner has responded by quoting *In re Fine*, 837 F.2d 1071, "that motivation, teaching or suggestion or that the knowledge is generally available to one of ordinary skill in the art is adequate". The Examiner's analysis found the motivation to combine six (6) references in the knowledge generally available to one of ordinary skill in the art. The Examiner quotes from *In re Scheckler* 58 CCPA 936 (1971). "It is not necessary that the references actually suggest expressly in so many words, changes or possible improvements, all that is required is that the invention was made by applying knowledge clearly present in the prior art."

However, applicant cites *Ex Parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993) that a statement that modifications of the prior art to meet the claimed invention would have been “well within the ordinary skill of the art at the time the claimed invention was made” because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. (*emphasis by applicant*) See also *Al-Site Corp. v. VSI Int’l Inc.*, 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999) (The level of skill in the art cannot be relied upon to provide the suggestion to combine references).

These cases clearly limit the older references as to what can be utilized to provide the suggestions to combine the references. Also, the prior art in five (5) of the six (6) patents utilized by the Examiner are in pertinent art, the sixth patent relates to production control systems for factories, not closely related as suggesting the desirability of the combination.

#### **Claim Group 2 (including Claims 2-7, 9-11, 14-17 and 19-21)**

The Examiner rejected claim 1-13 under 35 U.S.C. 103 (a) as being unpatentable over Wise in view of Webb and in further view of Davis. The Examiner states that Webb discloses an automated voting device consisting of a monitor and states that Wise fails to show one voting station to control the remaining stations. Wise has a separate vote entry controller 11. The Examiner states that it would have been obvious to allow vote entry controller 11 to function as a vote entry station 12 since the two booths are comprised of the same electronic elements (i.e. printer, keyboard, computer, mass data

storage device, and display) and are already interconnected. The Examiner states that vote entry controller 11 could function as a vote entry station 12, however Wise states specifically that the vote entry station is completely controlled by the vote entry controller. In Wise, the central controller is the central point of failure if the controller fails; the system is down, whereas in applicant's invention another station may pick up and take over the communicating functions. The Examiner states that Wise did not show an automated voting device utilizing a graphical user interface or any security aspects i.e., an internal password or external security check. The Examiner then utilizes Webb to furnish the security checks and Davis to include a touch screen display. The Examiner states that it would have been obvious to one of ordinary skill in the art to combine the teachings of the preceding inventors.

The examiner has also rejected claims 1-3, 5-7, and 9-11 under 35 U.S.C. 103(a) as being unpatentable over Wise in view of Webb and in further view of Davis. The examiner argues that Wise discloses a plurality of connected automated voting devices which are similar to applicant's invention. However, as noted, Wise describes a system having three different stations, a voter registration station 10 which comprises a computer 20, a keyboard 23, a display 21 and a bar code reader 24 (col. 5, lines 21-30 of Wise); a voter entry controller 11 to verify the voter's registration which comprises a computer 40, coupled to a keyboard 41, a display 42, a mass storage device 43 and a printer 44 (col.6, lines 19-24 of Wise); vote entry station 12 compromises a computer 61, a display 62, and a keyboard 63 having specially designed keys (col.8, lines 8-17 of Wise);. Each computer 61 has a data output port for transferring data to vote entry controller 11, and may also have a printer port for communicating with a printer 65.

Display 62 displays the responses of computer 61 to commands entered by the voter via keyboard 63. Each vote entry station 12 also has local data storage device 66 for storing votes. (col. 8, lines 8-16, Wise) To permit a voter to cast a vote requires the addition of a communication link(s). The vote entry controller 11 sends an activation signal to an idle vote entry station 12, via communication links 15, which causes that vote entry station 12 to become enabled. Then, the voter enters the enabled vote entry station 12, which is also computer-based and is programmed with a graphic voter interface program, which permits the voter to interactively enter votes. (col. 3, lines 41-48 of Wise)

Figure 1 of the Wise patent provides a block diagram of the voter registration station 10 and the vote entry controller 11. **Note: The Figure 1 diagram does not include any links or lines between the voter registration station 10 and the vote entry controller 11.**

To briefly summarize, Wise describes a three station semi-automated voting system requiring at least two precinct operators, and possibly three precinct operators, to ensure a secure voting process. Wise teaches using three separate and distinct computers to carry out the voting process. Wise goes on to specifically teach that having the voter registration station 10 physically and electrically isolated from the voter controller station 11 is advantageous for security and privacy. [Col. 1, lines 65-68; Col. 2, lines 1-2 and Col. 2 lines 14-20 of Wise; and as verified in Figure 1].

The device described and claimed by applicant is not taught by Wise. Wise does not teach using a plurality of identical devices to perform both the registration and the controller function for reporting to the central station as described in Wise. Applicant's

invention does not require communication links 15 between the vote entry controller 11 and the vote entry station 12 for communication of a vote entry station activation signal to enable or activate the vote entry station. If their registration information is not in the voter entry station, the voter may not vote. Regardless, the voter entry station is always on and active.

Applicant's invention also does not require having a precinct operator verify that the voter is registered. Wise requires a precinct operator to verify that the unique individual that completed the voter registration station 10 process is the individual who enters the physically separate voter entry station 12. The individual voter may vote if their registration information is found in the voter entry station 12.

Furthermore, the examiner states that Davis includes a voting terminal consisting of a touch screen display, however the replacement of a monitor and a keyboard by a touch screen display is not applicants invention and does not anticipate applicant's invention. One could combine the display of Davis with the device of Wise and still not have applicant's invention as set forth in the claims.

Applicant's invention as claimed and described is not obvious under 103(a). The combined teachings of Wise, Webb and Davis do not suggest using identical voter stations to carry out the three separate functions described by Wise and the applicant. If Wise describes and teaches the knowledge level of those skilled in the arts, it teaches away from applicant's invention and suggests that those skilled in the art would have separated the three functions into different stations in direct opposite to applicant's invention and implied benefits of increasing security and privacy. [Col. 2, lines 1-2 of Wise]

The examiner's analysis is in error. First, the examiner stated that "[o]ne of ordinary skill in the art would have readily recognized that having one vote processing system control all other vote processing systems is beneficial, as opposed to having two separate units, since the controlling system is merged into the voting station, thereby taking up less space and consuming less power. [Page 5-6, Paragraph 4, Examiner's response dated March 19, 2001 included in Appendix 7]. Next, the examiner reinforced this argument by stating that "[i]n this case the motivation to combine such references is found in the desire to create a unitary system to provide the operator of the voting station with a plurality of security features and to make the entire process of voting (from the beginning to the end) quicker, simpler and more efficient so as to conserve time, energy and cost". [Page 8-9, Paragraph 9, Examiner's response dated March 19, 2001 included in Appendix 7] The arguments misapply the law and indicate a lack of understanding of the teachings of the prior art.

The court has made it clear that "[a] prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, (Fed. Cir. 1983), cert denied, 469 U.S. 851 (1984)

(Claims were directed to a process of producing a porous article by expanding shaped, unsintered, highly crystalline poly (tetrafluoroethylene)(PTFE) by stretching said PTFE at a 10% per second rate to more than five times the original length. The prior art teachings with regard to unsintered PTFE indicated the material does not respond to conventional plastics processing, and the material should be stretched slowly. A reference teaching rapid stretching of conventional plastic polypropylene with reduced crystallinity combined with a reference teaching stretching unsintered PTFE would not suggest rapid stretching of highly crystalline PTFE, in light of the disclosures in the art that teach away from the invention, i.e., that the conventional polypropylene should have reduced crystallinity before stretching, and that PTFE should be stretched slowly.)

The Wise reference cited by the examiner teaches that having stations separated physically and electrically is beneficial in automating the process [Col. 2, lines 1-2 of Wise] for increased security and privacy. The benefits of increased privacy and security delivered through the separation of stations, as taught by Wise, would not suggest the desirability of the examiner's proposed combination of prior art references. Additionally, the benefits cited by the examiner, related to reducing space and energy use, also suggest the examiner's analysis of the references employed the impermissible benefit of hindsight vision as described and afforded by the claimed invention. See Hodosh v. Block Drug, Co.

The examiner has also rejected claim 4 under 35 U.S.C. 103(a) as being unpatentable over Wise/Webb and Davis as applied to claim 2 above, and further in view of U.S. Patent # 5,758,325 (hereinafter referred to as Lohry) Lohry teaches a password entry in an electronic voting system and the examiner argues that it would have been obvious to provide Webb/Wise with the password security as taught by Lohry. This however, still does not teach combining four patents with one little piece from each, none of which would teach applicants invention of having a single entity capable of performing all functions in a voting situation in direct violation of the test of obviousness as held by the court in Hodosh v. Block Drug.

Furthermore, claims 14-17 and 19-21 were rejected under 35 U.S.C. 103(a) as being unpatentable over Wise in view of Webb. The examiner states that Wise teaches everything except the steps of testing for pre-election and post-election program accuracy recording and tabulating votes within the vote entry station 12, and printing recorded election information on a related printer within the vote entry station 12. As

applicant has described, discussed and differentiated applicant's invention and claims above from Wise with regard to the voter registration station 10, the vote entry controller 11 and vote entry station 12 the combined teachings of Wise and Webb do not teach applicant's invention.

The examiner goes on to state that Webb teaches the steps of conducting an audit of the election at the start and end of the election if required and transferring election related information to a printer and printing out that information. The examiner states that combining the steps noted in the Wise reference with the security and information recording techniques noted in Webb's disclosure would provide a method for using an automated voted voting device that is a modern alternative to casting ballots at an election. The examiner states that Wise and Webb fail to teach one of a plurality of voting stations controlling all the other voting stations. Applicant submits that it would not have been obvious to combine the teachings of Webb to the voting system of Wise because they utilize totally different modes of operation and equipment.

Examiner has rejected claims 14-17, 19, and 20-23 under 35 U.S.C. 103(a) as being unpatentable over Wise et al. in view of Webb. Here again the Examiner states that it would have been obvious to make a vote entry controller 11 to function as a vote entry station 12 as previously discussed and still operate as a controlling station. The Examiner fails to state how the voter entry station could function as the vote entry controller in Wise or vice versa.

It is clear to applicant that the Examiner has taken a plurality of pieces of prior art each with a portion or some related function to applicant's invention and combined them to produce applicant's invention. Applicant submits that the invention is physically and



electronically different, performs different functions, and would require a complete redesign for any vote entry controller cited to be a voting station and a vote entry controller.

Furthermore, Davis teaches a voting system and all of the other prior art cited was available to combine but that such a combination was not done prior to applicant's invention. Wise also had Webb available for combination but did not include steps of testing for pre or post election accuracy as noted by the Examiner. If Wise indicated at least ordinary skill in the art at the time, it taught away from applicant's invention and did not fully automate the vote casting process but instead still required human intervention in the vote casting process. That they were combined for reference purposes and not physically combined previously reinforces the lack of suggestion or motivation to produce the claimed invention and indicates the examiner is applying impermissible hindsight to the combination of references to produce applicant's invention. Hodosh v. Block Drug.

## **Conclusion**

Applicant has argued that the Katayama reference is not applicable prior art and should not have been included in the Examiner's analysis. Applicant argues that the Katayama reference should be removed from the applicable art. Katayama is the year 2000 and not in the same art classes as the other art referenced. The invention described and claimed in Katayama must have the ability to process a plethora of information, collect a plurality of processing results and on that basis, set a new goal for each system considering the goal of the entire system which is much different than

applicant's teachings of 1) protection of the vote count and 2) elimination of communication of potential redundant vote counts. Katayama describes a classic master-slave relationship whereas the present invention does not require a master-slave system because all units are identical and equal.

The Examiner cites 1988 and 1992 federal circuit cases for authority as to the motivation to combine references. Applicant submits that the cases cited and discussed require the Examiner to show particular findings. The court notes in Werner Kotzab "particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed." The court also holds in Brown & Williamson Tobacco Corp. v. Philip Morris Inc., that "whether the prior art would have suggested to one of ordinary skill in the art that this process should be carried out and would have a reasonable likelihood of success, is to be viewed in the light of the prior art." In order to satisfy this criterion, the party alleging obviousness must show a suggestion, motivation, or teaching to combine the prior references as well as a reasonable expectation of success. Applicant submits that there has been no showing of any motivation to combine the numerous patents utilized to anticipate applicant's invention nor a reasonable expectation of success.

- v. Appellee examiner has issued no other rejections of appellant's claims based on general grounds.

Respectfully submitted,

FIDLAR AND CHAMBERS,

Date: 10-21-01

By \_\_\_\_\_

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**IX. Appendix**

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- 1. Clean Version of Claims**
- 2. U.S. Patent #6,073,054 issued to Katayama et al.**
- 3. U.S. Patent #5,218,528 issued to Wise et al.**
- 4. U.S. Patent #4,774,665 issued to Webb.**
- 5. U.S. Patent #5,583,329 issued to Davis, III.**
- 6. U.S. Patent #5,278,753 issued to Graft, III.**
- 7. March 19, 2001 Detailed Action by Examiner.**

## 1. Clean Version of Claims

What is claimed is:

1. An automated voting device comprising:
  - a) a voting station having an integrated computer program using an integrated pointing device;
  - b) a graphical user interface for displaying information and ballots;
  - c) a counter for counting votes;
  - d) said counted votes displayed on said interface;
  - e) said computer program includes the ability for the voter to write in votes and record the write in votes;
  - f) said votes stored in multiple places in said program for retrieval;
  - g) test programs to verify the accuracy of the voting station pre and post election.
2. The automated voting device of Claim 1 wherein said voting station includes at least two (2) security check operations.
3. The automated voting device of Claim 2 wherein one (1) of said security operations is an external device inserted into said voting device to activate said voting device.
4. The automated voting device of Claim 2 wherein one (1) of said security operations is the entry of an internal password provided by the election authority.

5. The automated voting device of Claim 2 wherein a seal provided by the election authorities is a fixed to said voting device, said seal numbers recorded separately from said station.
6. The automated voting device of Claim 1 wherein the touch screen is the only interface between the voter and the automated voting station.
7. The automated voting station of Claim 1 wherein the computer program permits the voter to void his ballot prior to casting.
8. The automated voting device of Claim 1 wherein the automated voting device is interconnected to other like stations and one of said automated voting stations selected to control the remaining voting stations.
9. The automated voting device of Claim 1 wherein the computer program includes more than two (2) languages and the voter can access the language of choice.
10. The automated computer device of Claim 1 wherein the voter confirms on said interface all selections made by poll watchers and as portrayed on the interface.
11. The automated voting device of Claim 1 wherein a printer connected to said voting station for printing results of the vote on said station.
12. The automated voting device of Claim 8 wherein the plurality of interconnected voting stations are controlled as to the selection of valid information by the controlling voting station.
13. The automated voting device of Claim 8 wherein said controlling voting station is programmed to transfer data regarding the voting to other locations while maintaining the vote results from individual voting devices separate.

14. The method of using individual computer voting stations and computer networking of said voter stations for automated voting comprising the steps of:
  - a) activating each of said individual computer voting stations utilizing security operations;
  - b) testing for program accuracy with pre-election check program;
  - c) authorizing by code for each voter activation of a ballot on an individual voting station;
  - d) interactively displaying ballot information on screens and receiving voter input from said individual computer station;
15. The method of Claim 14 and further comprising the step of recording and tabulating each vote entered by each voter in said voter station.
16. The method of Claim 14 further comprising the step of inactivating the vote capability of each individual station.
17. The method of Claim 14 further comprising the step of transferring information to a related printer and printing out the recorded information from said individual voting station.
18. The method of Claim 14 and further comprising the step of inactivating said individual voting stations.
19. The method of Claim 14 further comprising the step of testing the individual voting units for post election accuracy.
20. The method of Claim 13 and further comprising the step of inactivating and removing the security signals from individual stations.

21. The method of Claim 14 and further comprising the step of interconnecting a plurality of said individual voting stations.
22. The method of Claim 21 further comprising the step of selecting one (1) of the individual voting stations to become a controlling poll official station.
23. The method of Claim 21 wherein comprising the further step of said controlling poll official station authorizing the code for each voter activation of the ballot on an individual voting station.
24. An automated voting device comprising:
  - a) a voting station having an integrated computer program including a vote entry controller using an integrated pointing device;
  - b) a graphical user interface for displaying information and ballots;
  - c) a counter for counting votes;
  - d) said counted votes displayed on said interface;
  - e) said computer program includes the ability for the voter to write in votes and record the write in votes;
  - f) said votes stored in multiple places in said program for retrieval;
  - g) test programs to verify the accuracy of the voting station pre and post elections;
  - h) said computer program designed for controlling other identical voting stations.